

WHAT IS CLAIMED IS:

- 1 1. A collapsible stand for a bench-top power tool, the stand
2 comprising:
3 a plurality of legs spaced about a central axis of the stand, each leg
4 having an upper end and a lower end, each leg upper end being adapted to support
5 the power tool, each leg lower end forming part of a foot for contacting an
6 underlying support surface in an expanded position of the stand, each sequential pair
7 of legs being interconnected by cross members;
8 wherein the stand is expandable to a position for supporting the
9 power tool, and the stand is collapsible wherein the legs and cross members
10 collectively converge towards the central axis as the legs and cross members each
11 translate towards an orientation parallel to the central axis.
- 1 2. The collapsible stand of claim 1, further comprising a strap
2 formed of a hook and loop material, the strap having a first end affixed to one of the
3 legs or cross members and a distal second end for wrapping laterally about the
4 collapsed legs and cross members and for affixing to the first end for securing the
5 stand within the strap in the collapsed orientation.
- 1 3. The collapsible stand of claim 1, wherein at least two of the
2 plurality of legs are each generally parallel to one another in the expanded position
3 of the stand and are generally parallel to one another in the collapsed position of the
4 stand.
- 1 4. The collapsible stand of claim 1, wherein the plurality of legs
2 further comprise at least four inclined legs and the cross members further comprise
3 at least four cross members.
- 1 5. The collapsible stand of claim 1, wherein at least two of the
2 leg upper ends includes a projection sized to be received within a bore formed in the
3 power tool.

1 6. The collapsible stand of claim 5, wherein at least one of the
2 leg upper end projections includes a locking mechanism cooperating with the power
3 tool for locking the tool to the stand.

1 7. The collapsible stand of claim 1, wherein the plurality of legs
2 further comprise at least four legs and the cross members further comprise at least
3 six cross members.

1 8. The collapsible stand of claim 7, wherein the at least four legs
2 further comprise as at least two longitudinal legs and at least two inclined legs.

1 9. The collapsible stand of claim 7, wherein the at least four legs
2 further comprise at least four longitudinal legs and the at least six cross members
3 further comprise at least eight cross members.

1 10. A collapsible stand for a bench-top power tool, the stand
2 comprising:
3 a plurality of legs spaced about a central axis of the stand, each leg
4 having an upper end and a lower end, each leg upper end being adapted to mount
5 the power tool thereto, each leg lower end forming part of a foot for contacting an
6 underlying support surface in an expanded position of the stand; and
7 a plurality of cross members each generally inclined relative to the
8 central axis in the expanded position, each cross member being pivotally connected
9 to one of the leg upper ends, each cross member being operably connected to one
10 of the feet, and each cross member being pivotally connected to an adjacent cross
11 member for facilitating expansion of the stand for supporting the power tool, and
12 for facilitating collapsing of the stand wherein the legs and cross members
13 collectively converge towards the central axis as the legs and cross members each
14 translate towards an orientation parallel to the central axis.

1 11. The collapsible stand of claim 10, wherein at least one of the
2 leg upper ends includes a locking mechanism cooperating with the power tool for
3 locking the power tool to the stand.

1 12. A bench-top power tool assembly comprising:
2 a bench-top power tool having a first series of attachment
3 configurations formed about a peripheral edge; and
4 a collapsible stand having a second series of attachment
5 configurations spaced about a central axis for receiving the power tool first
6 attachment configurations, the stand having a plurality of legs and inclined cross
7 members operably connected to the second series of attachment configurations for
8 providing structural support to the power tool in an expanded position of the stand;
9 wherein the cross members are pivotally connected to the second
10 series of attachment configurations, and adjacent cross members are pivotally
11 connected to each other for permitting the cross members and legs to collectively
12 collapse towards the central axis whereby the legs and cross members each translate
13 towards an orientation parallel to the central axis.

1 13. The bench-top power tool assembly of claim 12, wherein the
2 bench-top power tool is further defined as a portable table saw.

1 14. The bench-top power tool assembly of claim 12, wherein the
2 plurality of legs and cross members are further defined as at least four legs and at
3 least six cross members.

1 15. The bench-top power tool assembly of claim 12, further
2 comprising a strap formed of a hook and loop material, the strap having a first end
3 affixed to one of the legs or cross members and a distal second end for wrapping
4 laterally about the collapsed legs and cross members and for affixing to the first end
5 for securing the stand within the strap in the collapsed orientation.

1 16. The bench-top power tool assembly of claim 12, further
2 comprising a strap formed of a hook and loop material, the strap having a first end
3 affixed to the power tool and a distal second end for wrapping laterally about the
4 collapsed legs and cross members and for affixing to the first end for securing the

5 stand within the strap and for securing the stand to the power tool in the collapsed
6 orientation.

1 17. The bench-top power tool assembly of claim 12, wherein the
2 power tool includes a nest for retaining the collapsed stand therein.

1 18. The bench-top power tool assembly of claim 12, wherein at
2 least two of the plurality of legs are each generally parallel to one another in the
3 expanded position of the stand and are generally parallel to one another in the
4 collapsed position of the stand.

1 19. The bench-top power tool assembly of claim 12, wherein at
2 least one of the second series of attachment configurations includes a locking
3 mechanism cooperating with the power tool for locking the power tool to the stand.

1 20. A portable table saw assembly comprising:
2 a saw base having a motor and a spindle driven by the motor oriented
3 within the saw base, the saw base having a series of bores formed therein and
4 oriented about a lower peripheral edge;

5 a table top affixed atop the base, spaced apart from the base lower
6 peripheral edge, for supporting a workpiece thereon;

7 a saw blade affixed to the spindle and driven thereby, the saw blade
8 extending through an opening formed through the table top; and

9 a collapsible stand for supporting the saw base in an expanded
10 position thereof, the stand having:

11 a series of pivot blocks, each pivot block having a projection
12 extending therefrom sized to be received within one of the series of saw base
13 bores, and

14 a series of links, each having an upper end pivotally
15 connected to one of the series of pivot blocks, and each having an
16 intermediate region and a lower end;

17 wherein each pivot block is pivotally connected to a pair of sequential
18 link first ends, each link intermediate region is pivotally connected to the

19 intermediate region of an adjacent link, and the lower ends of the links define feet
20 for supporting the stand and the saw base, the links cooperating to collectively
21 converge, each from an inclined orientation towards a central axis and towards an
22 orientation near parallel to the central axis.

1 21. The portable table saw assembly of claim 20, further
2 comprising a series of locking mechanisms, each cooperating with one of the series
3 of saw base bores and the corresponding pivot block projection for maintaining the
4 engagement therebetween.

1 22. The portable table saw assembly of claim 20, wherein the
2 lower end of each link is operably connected to a sequential link lower end.

1 23. The portable table saw assembly of claim 22, wherein a pair
2 of sequential link lower ends are pivotally connected to a common pivot block.

1 24. The portable table saw assembly of claim 20, wherein the
2 stand further comprises a plurality of longitudinal legs, each longitudinal leg being
3 affixed to a pivot block and each longitudinal leg being operably connected to a pair
4 of sequential link lower ends.

1 25. The portable table saw assembly of claim 24, wherein the
2 longitudinal legs are each generally parallel with one another in the expanded
3 position of the stand and in the collapsed position of the stand.

1 26. The portable table saw assembly of claim 24, wherein the
2 longitudinal legs are each generally parallel with one another in the expanded
3 position of the stand and the legs are each generally parallel with one another and
4 generally parallel with the links in the collapsed position of the stand.

1 27. The portable table saw assembly of claim 24, wherein the
2 stand further comprises a plurality of slider blocks each slidingly engaged with one

3 of the plurality of longitudinal legs and each pivotally connected to the
4 corresponding pair of sequential link lower ends.

1 28. A collapsible stand for a bench-top power tool, the stand
2 comprising:

3 an array of mounting configurations each adapted to receive and
4 support a portion of the power tool thereon in an expanded position of the stand,
5 wherein each sequential pair of mounting configurations is generally aligned with
6 a peripheral edge formed about a polygonal perimeter of the power tool; and

7 a plurality of link pairs, each pair generally lying in a plane with one
8 side of the polygonal perimeter of the power tool, each link being pivotally
9 connected to only one of two the mounting configurations associated with the
10 respective perimeter side, the pair of links each extending from the respective
11 mounting configuration to an orientation spaced apart from and aligned with the
12 opposed mounting configuration, the pair of links being pivotally connected for
13 facilitating uniform expansion and contraction of the collapsible stand.